Department of Mines, Minerals and Energy

Energy Conservation and Alternative Energy Supply Programs (50705)

Service Area Background Information

Service Area Description

This service area works to increase the use of alternative energy products and services, increase energy efficiency in state government operations, and improve other customers' ability to make informed choices related to energy efficiency and alternative energy uses, environment, and economic development activities. Products and services include:

- Customer service, such as training, technical assistance, education, helping with state government centralized electric, natural gas, and fuel oil purchasing, and emergency fuel supply management.
- Managing economic development incentives for solar industry development and providing information needed for new energy business development.
- Assisting energy extraction operators in developing new markets for their products and assisting mineral extraction operators reduce energy costs to improve productivity.
- Developing and maintaining the Virginia Energy Plan.

Service Area Alignment to Mission

This service area directly aligns with DMME's mission of enhancing the development and conservation of energy resources in an environmentally sound manner to support a more productive economy.

Service Area Statutory Authority

Chapter 26 of Title 45.1 of the Code of Virginia establishes the energy efficiency program requirements of the energy conservation and alternative energy supply programs service area.

Service Area Customer Base

Customer(s)	Served	Potential
General public and businesses	1,600,000	7,500,000
Mineral extraction operators	1	300
Other governmental agencies	130	225

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Anticipated Changes In Service Area Customer Base

General public and businesses

- All Virginia residents and businesses are potentially served through DMME's energy efficiency and alternative energy supply activities. Energy efficiency information is provided to all Virginia citizens through DMME's energy efficiency publications and web site. All Virginians using petroleum are affected by DMME's emergency management activities. All Virginia citizens and businesses, particularly energy businesses, will be served through the Virginia Energy Plan. Specific sub groups of general public and business customers include:
- -- Environmental organizations.
- -- Economic development organizations.
- -- Educational institutions.
- -- Homeowners.
- -- Fleet managers.
- -- Commercial, industrial, and agricultural businesses.
- DMME expects the general public and business customer base to increase over the next few years. As energy costs are expected to remain high, there will be increased interest in obtaining information about and financial support for energy efficiency and alternative energy technologies. There is expanding interest in developing biomass technologies, such as biodiesel production and wood-based fuels, hydrogen as an energy source, and wind resources. Public and business customers will look for increasing amounts of energy efficiency information as competition develops under utility restructuring. DMME also is expanding the information it makes available across the Internet. As information is more readily available in electronic form, additional customers will become aware of its availability, thereby increasing DMME's customer base.

Other governmental agencies

- DMME provides energy conservation and alternative energy supply services to a wide variety of governmental agencies:
- -- State agencies are a primary customer of DMME's energy efficiency services. DMME assists agencies in implementing energy service contracts for energy efficiency improvement projects in their facilities. DMME assists with submetering energy use in state facilities, in procurement of alternative sources of energy (electricity, natural gas, oil, and renewable energy supplies), and in training state agency energy managers how to reduce energy costs.
- -- DMME provides information on the energy business opportunities to economic development organizations to identify opportunities for new business investments and jobs in Virginia.
- -- DMME partners with other governmental agencies to reach joint energy-related goals in such areas as environmental protection, forest product uses, agriculture, transportation, and housing.
- -- DMME assists the Department of Emergency Management as the commodity manager for petroleum and solid fuels under the state's Emergency Operations Plan.
- DMME expects this customer group to grow in the next few years. As electric utility restructuring further develops, DMME will be increasingly asked to assist the Commonwealth with purchasing from new electric suppliers. As energy prices continue to run high, additional state agencies will need assistance with energy efficiency projects.

Mineral extraction operators

- The DMME Division of Energy partners with other DMME divisions serving the mineral extraction industry to provide opportunities to develop new markets for their energy sources and to increase efficiency of their operations.
- Mineral extraction operators are expected to request more assistance than in the past as high energy costs (fuel and power) cause their production costs to rise. Energy producers also are looking for new uses for their

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products, particularly marginal products such as low BTU gas that cannot be marketed through traditional channels.

Service Area Products and Services

- Customer assistance
 - Provide energy planning, training, technical assistance, education, and cooperative projects to implement energy efficiency and alternative energy projects.
 - Customer assistance services help customers efficiently use energy resource and develop new energy supply options.
- Grants and financing
 - Provide direct grants, serve as a grants manager for federal funds, and develop alternative financing sources for energy efficiency.
 - Grant services provide funds to facilitate mineral and energy projects that would not be undertaken without the extra financial support.
- Economic development
 - Manage economic development incentives, such as the biofuels incentive grant program, for energy industry development and provide information needed for new energy business development.
 - Economic development services support efforts to increase jobs and economic activity in Virginia.

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Factors Impacting Service Area Products and Services

- Customer assistance requests are expected to increase as energy costs remain high to address the need to save money spent on energy supplies. Utility restructuring provides the opportunity for state agencies and institutions to procure energy through new methods, increasing their needs for assistance. Mineral extraction companies can use assistance minimizing fuel costs in operations.
- Expansion of web-based electronic government capability will increase the opportunity to provide energy efficiency and grant information to DMME's customers.
- Efforts to centralize state government management activities, such as energy purchase contracts and energy project performance contracting, will increase the demand from state agencies for DMME's energy efficiency services.
- Some alternate energy development, such as wind and some hydro power development, will face opposition from people or groups that believe the locations of the development are not appropriate.
- Energy efficiency and alternative energy proponents are increasingly pushing for state support for increased activities through actions, such as public benefit funds, favorable tax treatment, or utility set asides.
- Changing federal funding priorities for energy efficiency and alternative energy projects may change the amount of resources available for state energy efficiency activities. The U.S. Department of Energy has proposed closing its regional Energy Efficiency and Renewable Energy offices and may lessen its support for market transformation activities.

Anticipated Changes To Service Area Products and Services

- There will be greater state agency, public, and business interest in energy efficiency information in response to high energy costs.
- DMME will need to lead the effort to develop the Virginia Energy Plan.
- DMME web-based services will need to expand to respond to increased electronic government activities.
- DMME service to state agencies will grow as central procurement of energy supplies are expanded.
- Opposition to some energy development projects may cause an increase in DMME's work to provide information about project benefits and impacts.
- Implementation of incentives for energy efficiency or alternative energy, such as the biofuels incentive program, will increase demands on DMME to support the incentives.
- Decreases in federal energy efficiency funds, coupled with the full expenditures of previously appropriated oil overcharge funds, could limit DMME's ability to provide energy efficiency and alternative energy services.

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Service Area Financial Summary

The Energy Conservation and Alternative Energy Supply Programs service area funding comes from federal funds (96%) and general funds designated for the Southern States Energy Board dues (4%).

	Fiscal Year 2007		Fiscal Year 2008	
	General Fund	Nongeneral Fund	General Fund	Nongeneral Fund
Base Budget	\$38,362	\$1,000,000	\$38,362	\$1,000,000
Changes To Base	\$1,346,400	\$100,000	\$196,400	\$100,000
SERVICE AREA TOTAL	\$1,384,762	\$1,100,000	\$234,762	\$1,100,000

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Service Area Objectives, Measures, and Strategies

Objective 50705.01

To advance knowledge and use of effective and efficient energy practices.

DMME coordinates development and implementation of energy policy in Virginia. This includes development of the Virginia Energy Plan, communicating energy information to government and private sector customers, and coordinates emergency response to petroleum and solid fuel emergencies.

This Objective Supports the Following Agency Goals:

• Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

(This objective is consistent with DMME's mission of enhancing the development and conservation of energy resources in an environmentally sound manner. Energy efficiency and alternative energy activities are mandated in Chapter 26 of Title 45.1 of the Code of Virginia. This objective aligns with DMME's strategic direction under goal 2, "Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources", and with the long-term objectives of Virginia to protect, conserve, and wisely develop our natural resources and to be a national leader in the preservation and enhancement of our economy.)

This Objective Has The Following Measure(s):

Measure 50705.01.01

Customers satisfied with the usefulness of DMME energy efficiency and alternative energy information.

Measure Type: Outcome Measure Frequency: Every Six Months

Measure Baseline: 90% (FY 2004)

Measure Target: >=90% (FY 2007 - FY 2008)

Measure Source and Calculation:

Customer satisfaction data is collected through an automated customer database survey tool. Customers respond based on the level at which their expectations were met. The percentage of customers indicating that they were satisfied with the quality, timeliness, ease of use, and usefulness of the information is calculated.

Objective 50705.01 Has the Following Strategies:

- The DMME, in collaboration with the State Corporation Commission, Department of Environmental Quality, the Virginia Center for Coal and Energy Research, and others, will lead in preparing the 10year Virginia Energy Plan.
- The DMME Division of Energy will update the energy management and efficiency information on the DMME website. Initial focus of changes will be to communicate the Virginia Energy Plan issues.
- The DMME Division of Energy will provide emergency response support to petroleum supply constraints in Virginia.

Objective 50705.02

To increase the use of alternative energy products and services.

DMME provides financial and logistical support to organizations developing projects that expand the use of renewable and innovative energy products and technologies, and assists economic development activities to expand renewable and innovative energy-based businesses in Virginia.

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This Objective Supports the Following Agency Goals:

• Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

(This objective is consistent with DMME's mission of enhancing the development and conservation of energy resources in an environmentally sound manner. Energy efficiency and alternative energy activities are mandated in Chapter 26 of Title 45.1 of the Code of Virginia. This objective aligns with DMME's strategic direction under goal 2, "Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources", and with the long-term objectives of Virginia to protect, conserve and wisely develop our natural resources and to be a national leader in the preservation and enhancement of our economy.)

This Objective Has The Following Measure(s):

Measure 50705.02.01

Percent hybrid and alternative fueled vehicles used by participating governments in Virginia.

Measure Type: Outcome Measure Frequency: Annually Measure Baseline: New measure. Baseline not yet established.

Measure Target: 2% (FY 2007)

Measure Source and Calculation:

Information is collected from fleet managers and the Virginia Clean Cities programs. Data on purchase history and vehicle type is evaluated to determine the annual percentage of hybrid and alternative fueled vehicles in their fleets.

Objective 50705.02 Has the Following Strategies:

- The DMME Division of Energy will actively engage Virginia economic development organizations to expand energy-based businesses in Virginia.
- The DMME Division of Energy will develop guidelines and administer the Photovoltaic, Solar, and Wind Energy Utilization Grant Program.
- The DMME Division of Energy will establish guidelines and administer the Biofuels Production Grant Program.
- The DMME Division of Energy will support partnerships and projects with organizations that share common purposes with the division.
- The DMME Division of Energy will support projects that promote the growth of renewable and innovative energy products and technologies.
- The DMME Division of Energy will develop guidelines and administer the Biofuels Production Grant Program.
- The DMME Division of Energy will develop a rating system for wind and solar power sites.
- The DMME Division of Energy will leverage resources, including the biofuels incentive grants, to enable the success of projects and partner organizations.

Objective 50705.03

To reduce future state government energy costs.

DMME assists state agencies that operate facilities to reduce their energy use and costs through implementing energy-savings performance contracting, energy monitoring, energy purchasing, training, and technical assistance. These efforts are closely coordinated with the Department of General Services.

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This Objective Supports the Following Agency Goals:

• Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

(This objective is consistent with DMME's mission of enhancing the development and conservation of energy resources in an environmentally sound manner. Energy efficiency and alternative energy activities are mandated in Chapter 26 of Title 45.1 of the Code of Virginia. Executive Order 54 (2003) set out the state agency energy savings goal in the objective. This objective aligns with DMME's strategic direction under goal 2, "Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources", and with the long-term objectives of Virginia to protect, conserve and wisely develop our natural resources and to be the best managed state in the nation.)

This Objective Has The Following Measure(s):

Measure 50705.03.01

Amount of saved energy costs achieved through energy conservation and procurement strategies

Measure Type: Outcome Measure Frequency: Annually

Measure Baseline: \$5 Million in saved costs (FY 2006)

Measure Target: To increase cost savings by 20% per year (FY 2007 - FY 2010)

Measure Source and Calculation:

Records of executed performance contracts and state agency utility accounts employing alternative energy strategies or rate schedules are compared to previous years to determine the annual growth in cost savings.

Objective 50705.03 Has the Following Strategies:

- The DMME Division of Energy will partner with state agencies to offer customized services including:
 - Performance Contracting.
 - Energy Savings Investment Program.
 - Other technical and financial assistance.
- The DMME Division of Energy, in collaboration with the Department of General Services and the State Council of Higher Education for Virginia, will analyze energy performance standards, recommend design and construction changes, and identify energy use benchmarks to measure energy performance.
- The DMME Division of Energy, in collaboration with the Department of General Services and the state agency energy advisory group, will pursue opportunities to improve procurement, payment practices, and management of utility contracts.

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